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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/767,509	01/28/2004	Wylci Fables	SSR-P3	5960	
26793	26793 7590 10/18/2006		EXAMINER		
LEIGHTON K. CHONG GODBEY GRIFFITHS REISS & CHONG 1001 BISHOP STREET, PAUAHI TOWER SUITE 2300			CRAIG, I	CRAIG, DWIN M	
			ART UNIT	PAPER NUMBER	
HONOLULU, HI 96813		2123			

DATE MAILED: 10/18/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

		Application No.	Applicant(s)			
Office Action Summary		10/767,509	FABLES ET AL.			
		Examiner	Art Unit			
		Dwin M. Craig	2123			
Period fo	The MAILING DATE of this communication app or Reply	pears on the cover sheet with the c	orrespondence address			
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).						
Status						
1)⊠	Responsive to communication(s) filed on 28 Ja	anuary 2004.				
	This action is FINAL . 2b)⊠ This action is non-final.					
3)□	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is					
	closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.					
Dispositi	on of Claims					
4)⊠	4)⊠ Claim(s) <u>1-20</u> is/are pending in the application.					
	4a) Of the above claim(s) is/are withdrawn from consideration.					
5)	5) Claim(s) is/are allowed.					
6)⊠)⊠ Claim(s) <u>1-20</u> is/are rejected.					
7)⊠	☑ Claim(s) <u>6</u> is/are objected to.					
8)□	8) Claim(s) are subject to restriction and/or election requirement.					
Applicati	on Papers					
9)⊠ The specification is objected to by the Examiner.						
10)⊠ The drawing(s) filed on <u>28 January 2004</u> is/are: a)□ accepted or b)⊠ objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).						
11) 🔲	11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.					
Priority u	nder 35 U.S.C. § 119					
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of:						
	1. Certified copies of the priority documents have been received.					
	2. Certified copies of the priority documents have been received in Application No					
	3. Copies of the certified copies of the priority documents have been received in this National Stage					
application from the International Bureau (PCT Rule 17.2(a)).						
* See the attached detailed Office action for a list of the certified copies not received.						
Attachment	• •	□	(DTO (40)			
	e of References Cited (PTO-892) e of Draftsperson's Patent Drawing Review (PTO-948)	4) Interview Summary Paper No(s)/Mail Da				
3) 🔀 Infom	nation Disclosure Statement(s) (PTO/SB/08) No(s)/Mail Date 2/7/2005.	5) Notice of Informal P 6) Other:				

DETAILED ACTION

1. Claims 1-20 have been presented for examination.

Specification

2. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

2.1 Applicants' abstract is over 150 words correction is required.

Drawings

3. The examiner objects to the drawings because they are informal. New drawings will be required which conform to 37 C.F.R. 1.84, the current drawings, have text with lines going through the text and text that is not centered in boxes as well as lines that are either too dark or too light. Correction is requested.

Claims Objections

4. Claim 6 is objected to because of the following limitation, ... agent behavioral responses to input data entries representing data occurrences <u>likely</u> to be encountered in a real-world data source..." it unclear to the examiner if the data input data entries are encountered, or if the Applicants' claim language only claims that it is *likely* that the data input entries are encountered,

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in which case this limitation is describing a possible outcome and not an actual concrete outcome. In Examiner believes that there is a possible 35 U.S.C. 112 2nd paragraph problem with claim 6 in that the current claim language is not *concise*.

Amendment and/or clarification are required.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

5. Claims 14 and 16-18 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

The method claims are not statutory as any computer-implemented method must produce a result which is concrete, tangible and useful. As set forth in MPEP 2106(IV)(B):

"In practical terms, claims define nonstatutory processes if they:

-consist solely of mathematical operations without some claimed practical application (i.e., executing a "mathematical algorithm"); or

-simply manipulate abstract ideas, e.g. a bid (Schrader; 22 F.3d at 293-94, 30 USPQ2d at 1458-59) or a bubble hierarchy (Warmerdam, 33 F.3d at 1360, 31 USPQ2d at 1759), without some claimed application."

Claim 14 is directed towards a computerized method to manipulate behavioral models of agents which is merely manipulating data structures using a computing device, the claims as set forth do not disclose that this process produces a concrete, tangible useful result.

As set forth in MPEP § 2106 (IV)(B)(2)(b)(i)

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"Examples of claimed processes that do not achieve a practical application include:

- step of "updating alarm limits" found to constitute changing the number value of a variable to represent the result of the calculation (Parker v. Flook, 437 U.S. 584, 585, 198 USPQ 193, 195 (1978));
- final step of "equating" the process outputs to the values of the last set of process inputs found to constitute storing the result of calculations (In re Gelnovatch, 595 F.2d 32, 41 n.7, 201 USPQ 136, 145 n.7 (CCPA 1979); and
- step of "transmitting electrical signals representing" the result of calculations (In re De Castelet, 562 F.2d 1236, 1244, 195 USPQ 439, 446 (CCPA 1977) ("That the computer is instructed to transmit electrical signals, representing the results of its calculations, does not constitute the type of post solution activity' found in Flook, [437 U.S. 584, 198 USPQ 193 (1978)], and does not transform the claim into one for a process merely using an algorithm. The final transmitting step constitutes nothing more than reading out the result of the calculations.")); and

-step of displaying a calculation as a gray code scale (In re Abele, 684 F.2d 902, 908, 214 USPQ 682, 687 (CCPA 1982))."

Comparing the above examples to claims 14 and 16-18, the claimed method merely performs a *selection* and fails to *display* the value as a result of the *modeling*. Claims 14 and 16-18 fail to teach or disclose even the storing in a memory or the display of the *behavioral* expression. It is noted that a claim may be statutory when it identifies the physical structure of manufacture in terms of its hardware, or a hardware software combination. Claims 14 and 16-18 do not recite any physical or hardware limitations, as set forth above. It is also noted that a claim

directed to a product that has a practical application in the arts may be statutory; e.g. a computer comprising a program that produces a concrete, tangible and useful result, as decided in Alappat (31 USPQ2d 1557) and State Street (47 USPQ2d 1601). As set forth above, the claimed method does not produce a concrete, tangible and useful result, therefore the method comprising a plurality of agent models, that are processed based on real-world data, fails to describe a product and apparatus or form such using a method that would have a practical application in the arts and are thus not statutory.

Therefore, claims 14 and 16-18 are considered to be non-statutory subject matter.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

- 6. Claims 1-20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
- example, the claimed limitations, primitive behavioral states and more complex behavioral states are not defined such that one of ordinary skill in the art would understand the metes and bounds of the claimed limitations. The current claim language is unclear and the specification fails to disclose the distinction between a primitive behavioral state versus a more complex behavioral state, and thus the current claimed limitations are not merely broad but undefined and ambiguous. Further, the current claimed terms, primitive behavioral state and complex

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behavioral state are not defined in the Applicants' specification such that an artisan of ordinary skill could clearly discern what the scope and meaning of these expressly disclosed limitations. Section 2173.05(b) of the MPEP states, "When a term of degree is presented in a claim, first a determination is to be made as to whether the specification provides some standard for measuring that degree. If it does not, a determination is made as to whether one of ordinary skill in the art, in view of the prior art and the status of the art, would be nevertheless reasonably appraised of the scope of the invention. Even if the specification uses the same term of degree as in the claim, a rejection may be proper if the scope of the term is not understood when read in light of the specification. While, as a general proposition, broadening modifiers are standard tools in claim drafting in order to avoid reliance on the doctrine of equivalents in infringement actions, when the scope of the claim is unclear a rejection under 35 U.S.C. 112, second paragraph, is proper. See In re Wiggins, 488 F. 2d 538, 541, 179 USPQ 421, 423 (CCPA 1973)."

6.2 Dependent claims 2-13, 15-18 and 20 have inherited this defect amendment and/or clarification is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 7. Claims 1-3, 5-16, and 18-20 are rejected under 35 USC 102(b) as being anticipated by US Patent 6,185,534 Breese.

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7.1 As regards independent claims 1, 14 and 19 and using independent claim 1 as an example, Breese discloses, a computer simulation method for modeling the response of one or more agents to real-world input data, comprising:

(Figures 1-13E and the descriptive text and Col. 1 lines 13-16 and Col. 1 lines 39-61 and Col. 6 lines 28-67 and Col. 7 lines 1-64 and Col. 7 lines 65-67 and Col. 8 lines 1-23),

(a) modeling an agent's behavioral expression in terms of a series of "scales" for behavioral expression

(Figure 15 and the descriptive text disclosed in *Breese* specifically Col. 16 lines 52-59), within a given cultural environment in response to real-world input data,

(Col. 8 lines 55-61 "...so alternative sources of information must be used..." the alternative information is the real-world information and Col. 12 lines 36-67 more specifically, "...receives inputs from the user interface representing observations of the user behavior" which is the same as real-world input and Col. 10 lines 39-53 specifically, "...general cultural expression..." as regards cultural environment),

wherein the scales of behavioral expression progress in logical definition from more primitive behavioral states to more complex behavioral states within the given cultural environment,

(Col. 17-23),

and wherein the agent's behavioral expression includes at least one expected agent behavioral response on one scale that is linked as an expected agent behavioral response on one other scale, whereby at least one example of a progression in agent behavioral responses across the scales can be monitored in the agent's behavioral expression; (b) running a computer

simulation in which one or more agents having respectively modeled behavioral expressions are selected to interact with selected sources of real-world input data;

(Figure 1 and the descriptive text and Figure(s) 5A, 5B, 6 and all descriptive text...)

(c) monitoring the interaction of the expected agent behavioral responses of the agent(s) in the computer simulation with the selected sources of real-world input data; and (d) displaying a simulation output in a visual form depicting the interaction of the expected agent behavioral responses of the agent(s) in the computer simulation with the selected sources of real-world input data,

(Col. 12 lines 36-67 and Col. 13 lines 1-3 and Col. 13 lines 19-39 and Figure 1 reference 146 and Figure 6 reference 660).

In general see also, (Figures 1-17 and Col. 1-22 and Col. 23 lines 1-22).

7.2 As regards dependent claim 2, Breese discloses, wherein the "scales" for behavioral expression include one or more behavioral types of the group consisting of: cultural characteristics; social characteristics; behavioral characteristics; emotional states; social interaction types; human desires; human beliefs; human empathy types; individual personality types; perception modes; and decision-making processes,

(As regards emotional states, see Figure 7 reference(s) 704 & 702 and Figure 9 and Col. 14 lines 47-67).

As regards dependent claim 3, Breese discloses, a computer simulation method according to claim 1, wherein the "scales" for behavioral expression include one or more behavioral types of the group consisting of: Scale of agent's consciousness or awareness of information that may be of interest; Scale of agent's navigation patterns, including the impulse to move in a particular

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direction, emotional patterns of the agent, or modes of categorizing and assigning labels to information items; Scale of agent's actions and reactions (including emotions) or intuition on a sense level to information; Scale of "information mulling" modes by which the agent retains a reservoir of information minutia and creates associations between information items; Scale of agent's employment of personal information filters and contextual memory for extracting meaning based on the agent's experience, and the roles they play; Scale of agent's employment of culturally-based filters, environmental assumptions and conditions, and/or social influences to extract meaning from information items; Scale of agent's learned modes of extracting meaning from externally presented information through media channels, news of events, images and portraits, current priorities, and other external phenomena, that may cause them to put medium or long term processes into effect or influence a particular response as typical; Scale of agent's learned or enduring knowledge of the environment he/she is involved in, its history, and its trends into the future; Scale of agent's complex of deeply held beliefs (including religion) and cultural or archetypal values; and Scale of agent's world view or overriding ethos through which all things, from the cosmos down to abstract minutia, are perceived,

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(As regards emotional states, see Figure 7 reference(s) 704 & 702 and Figure 9 and Col. 14 lines 47-67).

7.4 As regards dependent claims 5 and 18 and using dependent claim 5 as an example, Breese discloses, wherein the agent(s) selected to be run in the computer simulation include one or more agent types from the group consisting of: members of an organization; positions within an organization; a leader or "node" within an organization; a follower within an organization; a competitor to an organization; an enduring influence in the given cultural environment; domain

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knowledge in the given cultural environment; terrain knowledge in the given cultural environment; and a society, organization or institution.

(Figure 16G teaches different classes in a society, specifically terrain knowledge in the given cultural environment, more specifically a society, i.e. High Society, White Collar, Blue Collar as regards the limitation of "nodes" see Col. 17-22 and Col. 23 lines 1-6 and Col. 5 lines 16-30).

7.5 As regards dependent claim 6, Breese discloses, wherein the agent's behavioral expression is defined in terms of expected agent behavioral responses to input data entries representing data occurrences likely to be encountered in a real-world data source, and the real-world data input is a source of input data entries containing such data occurrences.

(See Col. 5 lines 30-42 and Col. 8 lines 55-61 and Col. 9 lines 15-29).

7.6 As regards dependent claim 7, Breese discloses, wherein within each scale a plurality of refined "levels" of agent behavioral responses within that scale are defined.

(See Figure(s) 16A-G and the descriptive text).

7.7 As regards dependent claim 8, Breese discloses, wherein within each level a plurality of refined "degrees" of agent behavioral responses within that level are defined.

(See Figure(s) 16A-G and the descriptive text).

7.8 As regards dependent claim 9, Breese discloses, wherein the agent's behavioral expression is defined in terms of keywords that the agent responds to in real-world text data, and the computer simulation proceeds by filtering the input real-world text data for keywords matching those of a word list associated with the modeling of the agent(s) selected for the simulation, and the matched keywords are processed through the agent's behavioral expression

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by linking keyword matches found at each scale to other keyword matches found at each other linked scale until the linking of input-response matches reaches a terminating stage.

(See Figure 17 and See Col. 5 lines 30-42 and Col. 8 lines 55-61 and Col. 9 lines 15-29).

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7.9 As regards dependent claim 10, Breese discloses, wherein the processing of keyword matches through the agent's behavioral expression is monitored and displayed in a visual form in a waveform chart displaying the frequency of keyword matches of the input text in terms of scale/level/degree.

(See Figure(s) 16A-G and the descriptive text and Figure 15).

- 7.10 As regards dependent claim 11, *Breese* discloses, the functional equivalent of a star chart (Figure 10).
- 7.11 As regards dependent claim 12, *Breese* discloses, the functional equivalent of a grid chart (Figure 15).
- 7.12 As regards dependent claim 13, Breese discloses, wherein the processing of keyword matches through the agent's behavioral expression is monitored and displayed in a visual form in a pole chart displaying markers for keyword "hits" of an agent expression in response to an input text in terms of scales as poles, level as vertical position on the poles, and degree as horizontal position of a marker at a given level on a given pole.

(See Figure 15 and the descriptive text).

7.13 As regards dependent claim 15, Breese discloses, further comprising programming a display of simulation output in a visual form depicting the interaction of the expected agent behavioral responses of the agent(s) in the computer simulation with the selected sources of real-world input data.

(See Figure 1 reference 146, and Figures 5A & 5B and Figure 6 and Col. 6 lines 28-67 and Col. 7 lines 1-64 and Col. 12 lines 36-67 and Col. 13 lines 1-3).

7.14 As regards dependent claim 16, Breese discloses, wherein the "scales" for behavioral expression include one or more behavioral types of the group consisting of: cultural characteristics; social characteristics; behavioral characteristics; emotional states; social interaction types; human desires; human beliefs; human empathy types; individual personality types; perception modes; and decision-making processes.

(See Figure(s) 16A-G and the descriptive text and Figure 15).

7.15 As regards dependent claim 20 Breese discloses, wherein the visual display is one or more display types from the group consisting of: (i) a waveform chart displaying the frequency of keyword matches of the input text in terms of scale/level/degree; (ii) a star chart displaying patterns of scale progression for an agent expression in response to an input text; (iii) a grid chart displaying the patterns of scale progression for an agent expression in response to an input text; (iv) a pole chart displaying markers for keyword "hits" of an agent expression in response to an input text in terms of scales as poles, level as vertical position on the poles, and degree as horizontal position of a marker at a given level on a given pole; and (v) a waveform chart displaying the frequency of keyword matches of the real-world input data in terms of time.

(See Figures 10 and 15 and the descriptive text).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

- 1. Determining the scope and contents of the prior art.
- 2. Ascertaining the differences between the prior art and the claims at issue.
- 3. Resolving the level of ordinary skill in the pertinent art.
- 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

- 8. Claims 4 and 17 are rejected under 35 USC 103(a) as being unpatentable over US Patent 6,185,534 Breese in view of "When the SIMSTM GET REAL: AN ANALYSIS OF HOW DIGITAL PLAY SPACES PROMOTE LEARNING IN LOW-INCOME, DIVERSE COMMUNITIES" by Kallen E. Tsikalas, hereafter referred to as *Tsikalas*.
- 8.1 As regards dependent claims 4 and 17 and using dependent claim 4 as an example, Reese does not expressly disclose, real-world data input includes one or more sources from the group consisting of news sources; broadcast media; communications and interactions between

participants; publicly available information; information sources available to selected agents; information sources available to selected organizations; analyst reports; reviews; search data; general literature; movies; images; sound; and other human perceptual data.

Tsikalas expressly teaches real-world data input includes one or more sources from the group consisting of news sources; broadcast media; communications and interactions between participants; publicly available information; information sources available to selected agents; information sources available to selected organizations; analyst reports; reviews; search data; general literature; movies; images; sound; and other human perceptual data,

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Breese and Tsikalas are analogous art because they are from the similar problem solving area of modeling agent behavior based on real-world input.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to have included the effects of broadcast media as disclosed in *Tsikalas* into the modeling of agent behavior as disclosed in *Breese*.

The motivation for doing so would have been to make the agents emotional reactions modeled closer to the way a real person would behave by including the influence of the new media and thus provide a simulation with greater fidelity. This motivation is know to the examiner as the simulation technological arts are always trying to improve simulations to provide a simulation model that more closely resembles reality, Further the examiner notes that the methods disclosed in Tsikalas have been found to be useful for helping low-income, preadolescents to improve learning and cultural understanding see Abstract and Conclusion of Tsikalas.

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Therefore, it would have been obvious to combine *Tsikalas* with *Breese* to obtain the invention as specified in claims 4 and 17.

Conclusion

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dwin M. Craig whose telephone number is (571) 272-3710. The examiner can normally be reached on 10:00 - 6:00 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul L. Rodriguez can be reached on (571) 272-3753. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Dwin McTaggart Craig

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